35 U.S.C. §103 Rejections

Claims 1-3, 5, 15-17, and 20-23, as well as claims 4 and 19, and claims 6 and 18, all stand rejected under 35 U.S.C. §103.

Claims 1-3, 5, 15-17, and 20-23 are rejected as being obvious from Ramm, U.S. Patent No. 3,633,943, in view of Nurse, U.S. Patent No. 5,482,621. With respect to claim 1, and claims depending either directly or indirectly therefrom, it is respectfully submitted that a prima facie case of obviousness has not been established. In order to establish a prima facie case of obviousness, the proposed combination would have to teach or suggest to a person of ordinary skill in the art *every limitation* of the rejected claims. In the rejection, it is stated that Ramm "discloses a tee divided in two mating halves.... When they are connected, they form a main body..., defining a tubular opening. A cylindrical uppermost hub ..., coaxial with the main body and having an inner diameter greater than the diameter of the main body. An inlet/outlet port ... in communication with the tubular opening. The hub can be connected to a tubular pipe." Nurse is then relied upon for its teaching of a tee having an elongated main body.

In the Response to Arguments portion of the Office Action mailed July 2, 2002, which was made Final, it is stated that "[a]s to the fact that the tee comprises an inlet/outlet port, having an inlet/outlet hub with a diameter sized to receive a pipe of a second diameter and greater than the diameter of the main body, Ramm discloses the invention as claimed." However, this rejection omits an important limitation of claim 1, which not disclosed or suggested by Ramm nor Nurse, alone or in combination. Specifically, claim 1 reads in pertinent part (with added emphasis):

> ... an inlet/outlet port in communication with the tubular opening, the inlet/outlet port having an inlet/outlet hub at an open end thereof, said inlet/outlet hub having a diameter sized *so as to receive a pipe of a first outer diameter and being adaptable to receive a pipe of a second outer diameter*, said diameter of the inlet/outlet hub being greater than the diameter of the elongated main body portion.

The rejection makes no mention of either Ramm or Nurse disclosing, suggesting, or teaching, whether alone or in combination with one another, a tee having an inlet/outlet port with an inlet/outlet hub having a diameter that is sized to receive a pipe of a *first* outer diameter, and that is also adaptable to receive a pipe of a *second* outer diameter. The important reason why the rejection does not address this limitation is that these two references do not disclose, suggest or teach such a feature. However, as described, for example, in the carry-over paragraph at pages 17-18 of Applicant's specification, this attribute allows the tee of claim 1 to accommodate Schedule 40 sized pipe (i.e., a pipe having a first outer diameter) at its inlet/outlet hub, and yet be adapted so as to also accommodate smaller and thinner walled pipe, such as SDR 35 pipe or ASTM 2729 pipe (i.e., a pipe having a second outer diameter).

To the contrary, even if Ramm were to be modified by Nurse in the manner proposed, i.e. to include Nurse's teaching of an elongated main body, the inlet/outlet hub would still be that of Ramm, which is not shown or suggested to be adaptable to accommodate two different sizes of pipe in one inlet/outlet hub. Indeed, the inlet/outlet port of Ramm has only a very short inlet/outlet hub (un-numbered). The Applicant submits that such a short inlet/outlet hub is simply too short to accept any kind of adapter or reducer bushing to enable the inlet/outlet hub to accommodate a narrower pipe, due to the fact that such a reducer bushing could not be securely received in such a hub, and tightly receive and retain a smaller diameter pipe fitted therein. There is no teaching or suggestion in Ramm to make a long enough inlet/outlet hub to properly accept and retain such an adapter or reducer bushing. And, again, there is no teaching or suggestion in Ramm or Nurse to even use such an adapter or reducer.

The tee baffle of the present invention is particularly advantageous inasmuch as it provides an inlet/outlet hub sized to receive Schedule 40 pipe, but has a wall thickness for much of the body of the tee baffle that is only as thick as SDR 35 pipe. For example, claim

15 claims the elongated generally cylindrical main body portion having a wall thickness between 0.075" and 0.100" over a substantial portion thereof. This thin-walled construction results in significant cost savings from a manufacturing standpoint for several reasons. For example, less plastic material is required. Also, with the thin-walled construction, there is less plastic material to cool, so cycle time is greatly reduced, as compared to conventional tees having thick walls. Thus, not only is the dollar cost per tee reduced by the claimed invention, but also, the manufacturer's output is increased.

The tee baffle is also lighter than a conventional tee having a thickness and diameter typically provided for receiving Schedule 40 sized pipe, thus resulting in significant savings in shipping costs, as well as ease of handling and manipulation during installation, particularly since the tee has an integral elongated main body portion, avoiding the need for cutting lengths of pipe to add to the bottom of a conventional tee, which would be necessary for many applications.

The tee baffle's ability to accommodate not only a Schedule 40-sized pipe at the inlet/outlet hub, but also be adapted to receive smaller diameter pipe, such as SDR 35 pipe, at the inlet/outlet hub results in a significant further benefit over the prior art inasmuch as the precaster or the installer need only inventory or purchase one tee product instead of multiple tee products for use with a variety of differently-sized pipe.

Furthermore, regarding claims 1 and 23, the statement in the Response to Arguments section of the last (Final) Action (page 6), that "[t]he invention is directly [sic.] to a tee having a main body that can be divided in two equally [sic.] pieces, as disclosed by Ramm" is incorrect. That statement improperly imports limitations from Applicant's specification into the claims. As discussed on page 24 of the specification, "the inventor's most preferred embodiment of the present invention is to have the tee baffle molded *as a single piece*, while still maintaining the attributes of the thin-walled two piece tee, and still accomplishing the

effectiveness of that two-piece tee over a conventional prior art tee when used in septic and other on-site waste disposal settings ...." (emphasis added). These claims are not limited to a less-preferred, two-piece embodiment.

Regarding claim 5, the Applicant now amends claim 5 to even further distinguish the claim from Ramm, by amending the claim to include at least two horizontal reinforcement ribs on the outer wall of the elongated main body portion of the tee.

In the rejection, it is stated that Ramm discloses a tee "divided in two mating halves." Claims 15-17, however, include the language "one-piece sanitary tee", which is not shown by Ramm. As discussed above with respect to claim 1, and claims depending therefrom, forming the claimed tee from two mating halves is not a limitation of those claims. (Claims 7-14 and 24 did include such limitations, but those claims have been withdrawn from consideration, as noted in the first paragraph of the July 2, 2002 Office Action).

As to claims 15 and 22, despite a concession in the Office Action that Ramm fails to disclose the wall thickness of the main body is between .075" to .1", the rejection states "that this kind of range in the wall thickness is standard for pipes." While it may be the case that this range of wall thickness is standard for *pipes*, it is respectfully submitted that this kind of range in wall thickness is clearly much narrower than what is conventionally used in *tees* for the inlet or outlet of septic tanks and other on-site waste disposal systems, particularly where an inlet/outlet hub is typically and preferably sized to receive a Schedule 40 sized pipe. Such *tees* (i.e. as opposed to *pipes*) typically have a main body wall thickness significantly greater than in the claimed range of .075" to .1", and usually are the thickness of Schedule 40 sized pipe. This is because such a thin wall would have been expected by people of ordinary skill in the art to be too thin to be strong enough to support the relatively thick Schedule 40 pipe, or to withstand the pressures to which plumbing tees (of the type conventionally retrofitted for use in the septic tank and on-site waste disposal area) are exposed in their intended

plumbing applications, and thus would have been expected by those ordinarily skilled to be undesirable. The tee of the present invention therefore unexpectedly provides an inlet/outlet hub sized to receive Schedule 40 pipe, and is also adaptable to receive smaller diameter pipe (e.g., SDR 35 pipe), yet the tee has a wall thickness over its main body portion significantly thinner than conventional tees that can receive Schedule 40 pipe, and is nevertheless quite strong and durable. For these reasons, the Applicant respectfully requests the allowance of claims 15 and 22.

Regarding the rejections of claims 4, 6, and 19, it is respectfully submitted that these claims depend from claim 1, which for the reasons explained herein is non-obvious over the prior art cited, and thus claims 4, 6, and 19 should likewise be considered allowable. As to the rejection of claim 18, it is respectfully submitted that inasmuch as the claim depends from claim 15, which is non-obvious over the prior art cited for the reasons explained herein, claim 18 should likewise be considered allowable. It is therefore respectfully submitted that a prima facie case of obviousness as to claims 1-3, 5, 15-17, and 20-23, has not been established, and allowance of all such claims is respectfully solicited.

Secondary Considerations of Non-Obviousness

Even if a prima facie case of obviousness were made out as to the claims still pending in this application, which the Applicant respectfully submits is not the case, the Applicant submits herewith, in accordance with 37 C.F.R. §1.114(c), new objective evidence of certain "secondary considerations" of non-obviousness, in the form of an Affidavit of Theodore W. Meyers Under 37 C.F.R. §1.132, with supporting documents, to demonstrate commercial success and copying of others. This new evidence further shows the non-obviousness of the Applicant's invention. When such objective evidence is of record, it must be considered. M.P.E.P. §716.01(a)(Eighth Edition). According to the U.S. Court of Appeals for the Federal Circuit:

> [E]vidence of secondary considerations may often be the most probative and cogent evidence in the record. It may often establish that an invention appearing to have been obvious in light of the prior art was not. It is to be considered as part of all the evidence, not just when the decisionmaker remains in doubt after reviewing the art.

Stratoflex, Inc. v. Aeroquip Corp., 218 U.S.P.Q. 871, 879 (Fed. Cir. 1983).

Objective Evidence of Commercial Success

The accompanying Affidavit of Theodore W. Meyers Under 37 C.F.R. §1.132 explains that Tuf-Tite began to market its T-BAFFLE tee, made in accordance with the claims of the subject application, in May of 2000. From the introduction of the T-BAFFLE tee through September, 2002, as evidenced by the sales reports attached to Mr. Meyers' Affidavit, Tuf-Tite sold a total of 122,527 T-BAFFLE tees, for a total dollar sales of $359,746.00. Mr. Meyers, president of Tuf-Tite, Inc. and holder of thirteen issued United States patents in the on-site waste component field, states in his Affidavit that he is familiar with the art of design and manufacture of septic tanks and other on-site waste disposal systems, as well as design and manufacture of the various injection-molded plastic components used in conjunction with such waste disposal systems. In particular, he notes he is familiar with tees utilized at the inlet and/or outlet of septic and other on-site waste disposal systems to direct the flow of unfiltered and filtered effluent. (Aff. at ¶¶ 4, 5) Mr. Meyers further states:

> Tuf-Tite is a manufacturer and supplier of various products in the septic tank and other on-site waste disposal equipment field. Tuf-Tite has introduced numerous new products in the septic tank/on-site waste disposal area over the years. Thus, I am familiar with the history, sales growth, and performance of new products in this field. With particular relevance here, soon after introducing the tees made in accordance with the claims of the subject patent application to customers, I immediately recognized a dramatic volume of sales of such tees, and much more than I expected based on my long experience in this field.

(Aff. at ¶ 6). These remarkable sales in the first 29 months of selling the T-BAFFLE product, with a total of 49,164 units for dollar sales of $138,079.00 in the very first year alone, are

respectfully submitted to be evidence of commercial success of the T-BAFFLE tees, made in accordance with the claims of the subject application.

The Federal Circuit has held that commercial success is a strong factor favoring non-obviousness. Akzo N.V. v. International Trade Comm'n, 1 U.S.P.Q.2d 1241 (Fed. Cir. 1986). Further, the "nexus" between the commercial success and the invention is established by showing that the commercially successful product is the invention disclosed and claimed in the patent application. *See* Demaco Corp. v. F. Von Langsdorff Licensing, 7 U.S.P.Q.2d 1222, 1226 (Fed. Cir. 1988):

> A prima facie case of nexus is generally made out when the patentee shows both that there is commercial success, and that the thing (product or method) that is commercially successful is the invention disclosed and claimed in the patent. When the thing that is commercially successful is not coextensive with the patented invention - for example, if the patented invention is only a component of a commercially successful machine or process - the patentee must show prima facie a legally sufficient relationship between that which is patented and that which is sold.

Importantly, there is no requirement that the Applicant prove that the commercial success of the invention is not due to factors other than the claimed invention, and it is sufficient to show that the commercial success was of the invention itself. *Id.*, at 1227-28:

> By placing the burden on Langsdorff to prove that commercial success was not due primarily to advertising or other factors such as technical service to licensees and the licensing of other products, the district court put the shoe on the wrong foot.

Thus, it is respectfully submitted that Mr. Meyer's Affidavit and the documents attached thereto adequately establish commercial success of the Tuf-Tite T-BAFFLE tee. The commercial success of the T-BAFFLE tee is particularly compelling in view of the fact that regulatory approval to permit use of the tees is still pending in several states. (Meyers Aff. ¶ 9) Thus, the substantial sales occurring thus far have been of tees purchased for use only in those jurisdictions where regulatory approval has been obtained or is not required. Once Tuf-

Tite obtains additional regulatory approvals, such as in Arkansas and Indiana, sales of the T-BAFFLE tees are expected to continue to improve. (Meyers Aff. ¶ 9).

Objective Evidence of Copying

The accompanying Meyers Affidavit yet further shows evidence of another secondary consideration of non-obviousness, specifically that of copying by others. *See, e.g.,* Windsurfing International, Inc. v. AMF, 228 U.S.P.Q. 562 (Fed. Cir. 1986)(indicating that copying of another's invention is evidence of nonobviousness). As explained in the Affidavit and shown in the sales reports attached thereto, Zabel Environmental Technology, a/k/a Zabel, Inc., ("Zabel"), a competitor of Tuf-Tite, initially in brisk fashion, purchased large quantities of the Tuf-Tite T-BAFFLE tees:

> [B]etween June 19, 2000 and December 20, 2000... Zabel purchased 14,040 of the "T-BAFFLE" tees from Tuf-Tite, for a total of $44,928.00.... [S]ince December 20, 2000, Zabel has not purchased a single T-BAFFLE tee from Tuf-Tite, despite continuing to purchase numerous other Tuf-Tite, Inc. products related to septic tanks and other on-site waste systems.

Meyers Aff., ¶¶ 10, 11.

Soon after sales of the T-BAFFLE tees to Zabel ceased, Zabel began advertising and selling its own tee for septic and other on-site waste disposal systems, under the trade name "Versa-Tee™" (See Meyers Aff., ¶ 12). As shown in the marketing materials attached to Mr. Meyers' Affidavit as Appendices 4 and 5, the Zabel tee embodies many, if not all, of the claimed features of the subject application. Until the "T-BAFFLE" tees, and then the later Zabel "Versa-Tee™" product, there have not been any tee products with available on the market with the claimed features discussed in the following paragraphs.

Claims 1, 15, and 23 of the present application include the tee being provided with an inlet/outlet port in communication with the tubular opening of the tee, the inlet/outlet port having an inlet/outlet hub at an open end thereof, the inlet/outlet hub having a diameter sized so as to receive a pipe of a first outer diameter and also being adaptable to receive a pipe of a

second outside diameter, and the diameter of the inlet/outlet hub being greater than the diameter of the elongated main body portion. Claim 15 further includes the tee having an elongated generally cylindrical main body portion having a wall thickness between 0.075" and 0.100" over a substantial portion thereof.

As the Meyers Affidavit establishes, Zabel's tee is similarly provided with an inlet/outlet port in communication with the tubular opening of the tee, the inlet/outlet port has an inlet/outlet hub at an open end thereof, the inlet/outlet port has a diameter that is sized to receive a pipe of a first outer diameter (i.e., Schedule 40 pipe), the inlet/outlet hub is adapted to also receive a pipe of a second outside diameter (i.e., SDR 35 pipe), and the diameter of the inlet/outlet hub is greater than the diameter of the main body portion of the tee (as demonstrated by the fact that the portion of the inlet/outlet hub is sized to receive SDR 35 pipe, the smallest diameter of that hub, is the same diameter of the uppermost hub of the tee, which is larger than the diameter of the main body portion of the tee). (Meyers Aff., ¶ 17) The Zabel Versa-Tee™ product also has a generally cylindrical main body portion, with a wall thickness significantly thinner than, on the order of about half the thickness of, Schedule 40-sized pipe. (Meyers Aff. ¶ 15).

These striking similarities between the features of the Tuf-Tite T-BAFFLE tees, which embody the claims of the present application, on the one hand, and Zabel's "Versa-Tee" tees on the other, coupled with the conspicuous halt in sales to Zabel of the Tuf-Tite T-BAFFLE tees prior to Zabel's introduction of the "Versa-Tee" tees, notwithstanding ongoing sales of various other Tuf-Tite septic tank and other on-site waste system-related products to Zabel, conclusively show copying of the Applicant's claimed invention. That evidence of copying is sufficient to demonstrate the non-obviousness of Applicant's claimed invention.

Response to Election/Restriction

The Applicant confirms the constructive election of the original set of claims, and now cancels without prejudice claims 25-27, which are indicated in the Office Action to have been withdrawn from consideration.

CONCLUSION

In view of the foregoing, it is respectfully submitted that a prima facie case of obviousness has not been established with respect to claim 1 and the claims depending therefrom. Claim 5 has been amended so as to further distinguish the claim from Ramm. The non-obviousness of the Applicant's claimed invention is further shown by objective evidence, in the form of secondary considerations, of non-obviousness explained in the accompanying Affidavit of Theodore W. Meyers Under 37 C.F.R. §1.132 and the documents appended thereto, namely commercial success and copying by others.

Based on these considerations, and the arguments and amendments herein, the Applicant respectfully requests allowance of the claims still pending in the application. The Examiner's favorable action is respectfully solicited. In the event the Examiner has any questions that might be easily resolved by telephone, he is invited to call the Applicant's undersigned representative at (312) 474-6300.

Attached hereto is a page captioned VERSION WITH MARKINGS TO SHOW CHANGES MADE, showing the amendments to the claims requested in this Amendment.

Respectfully submitted,

Jeremy R. Kriegel

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Certificate of Mailing by Express Mail

I hereby certify that this correspondence, and the accompanying Affidavit, are being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV181427580US, in an envelope addressed to: Commissioner for Patents, Washington, DC 20231, on the date shown below.

Dated: December 2, 2002 Signature: _____ (Richard Zimmermann)

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Please amend claim 5 as follows:

5 (Three Times Amended). The tee of claim 1, further comprising at least [one] two horizontal reinforcement ribs on an outer wall of the elongated main body portion.

Please cancel claims 25-27, without prejudice.